## **INCIDENT ACTION PLAN**

Be brief and concise with your entries

Location	Control Level	Operation	al Poriod
Bayou Corne	Company Supervisory		
Sink Hole		From 3/29/15	То 3/30/15
<b>1.0 SITUATION</b> Disease, community, environment	CURRENT         Mostly Sunny         PREDICTION         A mainly sunny sky. 0% chance of precipitation. High Temperature near 80.		
PROMPTS: Weather, disease trends, Resources, Hazards & safety			
REFERENCE: Maps, weather reports, Sitreps, appreciation, warnings, alerts			
2.0 OBJECTIVES (or MISSION)	<b>CURRENT</b> <b>Objective 1 -</b> Demonstrating sinkhole containment and determining if additional sinkholes could form.		
PROMPTS: Time & space	<b>Objective 2 -</b> Locating and mitigating the risk posed by the presence of shallow gas.		
REFERENCE: Appreciation – control options, courses open to disease	<b>Objective 3 -</b> Confirming the broader stability of the Napoleonville Salt Dome.		
	<u>Current Actions:</u> (For planning purposes only, all activities are subject to change.)		
	ORW, MRAA, PMW, PVW and Geoprobe wells - Conduct daily well readings and flare maintenance - Monitor continuous dewatering of select ORWs		
	Air Monitoring/ Monitoring Equipment Daily monitoring of In-home gas monitors and AreaRAEs		
	Containment/ Roads/ Sinkhole - Daily berm inspections		
	<ul> <li>Tomorrow's Activities</li> <li>Conduct daily well readings and flare maintenance</li> <li>Conduct Daily berm inspections</li> <li>Monitor continuous dewatering of select ORWs</li> </ul>		
	- ORW-40 depletion test	~~~~	
	Sinkhole Activity – Code 3		
3.0 EXECUTION at	ld safety information as appropriate		
GENERAL OUTLINE	Safety Information: See Attache		6
PROMPTS: Strategies & tactics (current/proposed/alternate)	egies & tactics Additional to our Safe Work Rules for this project we are a		
REFERENCE: Appreciation, Control Options	Inspect location for flammability Daily Safety Meetings		
IAP [Bayou Corne Sink Hol Incident Action Plan template	e] – V# Version date: 3 Ma /3 – 3 May 2010 (INT10/24125)	ay 2010	Page 1 of 5

	PPE Required on site: Respirator w/ VOC Cartridge, Gloves for sampling, eye protection, life preservers, hearing protection.
GROUPINGS	ΝΑ
TASKS Including PR & Media	Same as above
COORDINATING INSTRUCTIONS PROMPTS: Timings, routes, assembly areas, staging areas	Texas Brine Grand Bayou Facility will be used as staging area.
	ION (Logistics support) , contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised,
SUPPLY WHO, WHAT, WHERE, WHEN of resources not readily available	NA
GROUND SUPPORT Transport of personnel, traffic mgt, refuelling, mechanical repair/maintenance	NA
COMMUNICATIONS Installation, maintenance, technical advice	Cell Phone & Landline Communications: Chad Morales – Area Manager – Scott Borne – Facility Manager – Scott Borne @texasbrine.com Joel Miller, PE – Consultant – Joel Miller, PE – Mark Cartwright – Operations/PR – Mark Cartwright – Technical/Engineering – Mark Cartwright – Technical/Engineering – Mark Cartwright – Technical/Engineering – Scott Whitelaw – Environmental/Safety – Swhitelaw@tum.com

### Texas Brine Grand Bayou Facility 1301 Hwy 70 South, Belle Rose, La 70341

### 5.0 ADMINISTRATION (Logistics services)

PROMPTS: Unit names, locations, contact names, phone no's, timings, duties/tasks, routes, suppliers, quantities, status (required, organised, stand by, enroute)\_\_\_\_\_

FACILITIES Security, waste, cleaning	ΝΑ		
CATERING	ΝΑ		
OH&S/MEDICAL Medical plan, first aid plan	Call 911		
FINANCE	ΝΑ		
TRAVEL	NA		
INDUCTION/ TRAINING	ΝΑ		
ACCOMMODATION	NA		
6.0 CONTROL, COORDINATION & COMMUNICATION			
CONTROL & COORDINATION STRUCTURE	Plant Management Supervision / Contractor Work		
REFERENCE Structural Chart			
COORDINATION & LIAISON	ΝΑ		
Local knowledge, police, agency reps, emergency mgt reps			

COMMUNICATIONS	Plant Management – Contractor Communication via Cell Phone
PROMPTS Communications structure, operational comms plan, information mgt	

EXTRAS		
Attachments PROMPTS:: maps, weather, organisational charts, resources, comms diagram	Current Weather Safe Work Rules	
Plan developers PROMPTS PO, Logs Mgr, Controller	NA	
Approval Controller, Ops Director	TBC Company Rep: William Booher FOSC: SOSC: POSC:	

Today's Forecast: Sunday, 29 Mar 202	15
80°F 55°F	- Marke
Sky Conditions: Mostly Sunny Sunrise: 6:59 AM Sunset: 7:19 PM Wind: NNW (330°) @ 11Mph	1
<b>Precipitation Probability:</b> 0%	

Extended Forecast		Full 10-Day Forecast >	
<b>Sunday</b>	<b>Monday</b>	Tuesday	
29 Mar 2015	30 Mar 2015	31 Mar 2015	
*		27	
Mostly Sunny	Partly Cloudy	Scattered Thunderstorms	
80°F	81°F	83°F	
55°F	61°F	62°F	

#### **Detailed Forecast**

#### Today:

A mainly sunny sky. High near 80F. Winds NNW at 5 to 10 mph. **Tonight:** Clear. Low 50F. Winds light and variable. **Tomorrow:** Partly cloudy. Highs in the upper 70s and lows in the mid 50s.

Seismic Code	Seismic Activity	Sinkhole Access	Berm Road Access	Work Allowed
1	Minimal to no seismic activity around/below sinkhole; 10 or fewer of the sharp seismic signals associated with rock movement, called mini-earthquakes (MEQs) or the longer signals associated with gas or liquid movement, called Very Long Periods (VLPs) within 24-hour period; allows work on sinkhole and inside berm area to continue	<ul> <li>Approved<sup>1</sup> work allowed only in designated areas of sinkhole. Some areas may be restricted due to unsafe conditions (e.g., leaning trees). Sinkhole grid system shown in Figure 1 will be used to define restricted areas for individual work activities.</li> <li>All vessels must have at least 2 persons. Workers must wear approved PFDs. No work allowed after sunset. Safety boat on standby.</li> </ul>	Access allowed on all berms and roads unless an area is physically barricaded.	Approved work allowed in unrestricted areas. Work area must be cleared of hazards and a Work Permit issued before start.
2	Indicates some increased seismic activity around/below sinkhole but not at a level that indicates imminent threat of sloughing or movement below sinkhole (10 to 50 MEQs or VLPs in 24 hours)	<ul> <li>Code 1 requirements plus:</li> <li>Each vessel inside designated sinkhole area (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel.</li> </ul>	Access allowed on all berms and roads unless an area is physically barricaded.	<ul> <li>Code 1 requirements plus:</li> <li>Each work activity must have a designated person with means to warn all workers of unusual activity on sinkhole.</li> </ul>
3	Indicates seismic activity has elevated to a point similar to what has been seen in past monitoring prior to a sloughing on the shore or movement beneath sinkhole (More than 50 MEQs or VLPs in 24 hours)	<ul> <li>Code 1 requirements plus:</li> <li>Each vessel inside the defined containment berm (see Figure 2) must have a designated shoreline watch who is in constant radio communication with vessel.</li> </ul>	All berm roads are closed except the north berm from the TBC Access road to Rig Road (unless restricted for non- seismic reasons). All other berms open only to UTVs for personnel doing approved work. Anyone on a UTV must have a radio, air horn, and approved PFD.	<ul> <li>Code 1 and 2 requirements plus:</li> <li>Work is allowed on a case by case basis as determined by TBC Operations:</li> </ul>

1. All site work must be approved by TBC Response Operations.

2. The Texas Brine access road from Highway 70 to Pad 10 is not considered part of the designated containment berm for purposes of this document.

3. Codes are set by Assumption Parish Office of Emergency Management

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## Site Safety for Sinkhole and Surrounding Area

In an effort to provide for a safe work environment in and around the Sink Hole, this procedure has been put in place to inform workers of their allowed Work Areas. This procedure is only guidance and should not exclude any other observation or safety precautions in place that may cause any danger to anyone. All workers entering the Texas Brine facility should be informed of the risks that are posed by this ongoing event.

This system has been developed using a Code System and is defined as follows:

## Code 1:

Is an all clear, with restriction to OXY pad 3 and the North pad area as indicated in the map below due to the concerns raised by Itaska.



# Code 2:

Restrict all activity from inside the Berm, but not the Berm itself or outside; recommend that all operations in the immediate vicinity of the sinkhole be halted immediately. The Inside Berm is defined as indicated on the map below in red.



# Code 3:

Restrict activity from inside and on the Berm, no work activity shall occur until Code level has been changed to allow. Continued monitoring of the berm for cracks and venting wells located adjacent to the berm. At this code level immediate notification shall be made of any changes that occur on sinkhole, swamp around sinkhole, or any changes to berm area. The Berm is defined as indicated in yellow on the map below.



# **Communication:**

All workers working in conjunction with this ongoing event shall be informed of these codes and communication protocol developed to inform everyone when codes may change at any time.